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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,489	09/29/2003	Sergei Vasilievich Borodaev	P69119US0	8483

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EXAMINER
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BRUENJES, CHRISTOPHER P

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 08/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/671,489

**Applicant(s)**

BORODAEV ET AL.

**Examiner**

Christopher P. Bruenjes

**Art Unit**

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 2, 2006 has been entered.

***WITHDRAWN REJECTIONS***

2. The 35 U.S.C. 112 rejections of claims 1-12 of record in the Office Action mailed February 2, 2006, Page 3 Paragraph 4, have been withdrawn due to Applicant's amendments in the Paper filed June 2, 2006.

3. The 35 U.S.C. 102 rejections of claims 1-2, 4-8, and 12 as anticipated by Julius of record in the Office Action mailed February 2, 2006, Pages 3-4 Paragraph 5, have been withdrawn due to Applicant's amendments in the Paper filed June 2, 2006.

Art Unit: 1772

4. The 35 U.S.C. 103 rejections of claims 3 and 9-11 over Julius in view of Strutzel of record in the Office Action mailed February 2, 2006, Pages 4-6 Paragraph 6, have been withdrawn due to Applicant's amendments in the Paper filed June 2, 2006.

***Claim Objections***

5. Claim 5 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 1, which claim 5 ultimately depends, already claims that the hydrophilic compound is water-soluble at 20°C. Claim 5 only states that the compound is water-soluble and does not specify the specific temperature; therefore it is a broader recitation than claim 1.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

Art Unit: 1772

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-8 and 12-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Yen (USPN 6,589,615).

Regarding claims 1 and 13, Yen anticipates a single-layer polymer film for food products (col.1, 1.5-6 and col.3, 1.53 - col.4, 1.3). The film consists essentially of a polyamide matrix and a component providing high permeability of the film with respect to smoke substances and water vapors (col.2, 1.8-21 and col.2, 1.28-37). The component is a hydrophilic compound in an amount of 5 to 95% and preferably 30 to 70% based on the total weight of the casing (col.3, 1.11-20). The hydrophilic compound forms in the polyamide matrix a highly dispersed phase with a linear domain size of 0.002 to 1 micron preferably 0.005 to 0.2 micron in a direction perpendicular to a surface of the film in the polyamide matrix (col.3, 1.5-10 and col.2, 1.8-15). The hydrophilic compound is soluble in water (col.2, 1.35-37). Regarding claims 2 and 3, the polyamide matrix comprises aliphatic polyamides such as polyamide 6 (see the Tables in columns 3-6). Regarding claims 4 and 5, the hydrophilic

Art Unit: 1772

compound is a homopolymer and/or copolymer of a monomer selected from the group consisting of alkylene glycols, such as polyethylene glycol or polyoxyethylene (col.3, 1.11-15).

Regarding claim 6, Yen teaches glycerine as one of the choices for the hydrophilic compound, which is a low-molecular weight compound. Regarding claim 7, Yen teaches that the component for providing high permeability of the film with respect to smoke substances and water vapors can be a mixture of the porosity modifier and inorganic filler (col.2, 1.23-24 and col.4, 1.15-17). The combined weight percentage of the porosity modifier and inorganic filler falls within the claimed range for the hydrophilic compound claimed and the inorganic filler is used with a particle size in a range of approximately 1 to 25 microns (col.3, 1.25-30), which overlaps with the claimed linear domain size of 0.1-3.0 microns. The inorganic filler is selected from a group containing inorganic salts such as sodium chloride and calcium chloride (col.3, 1.21-25). Therefore, in the embodiment in which the inorganic filler is incorporated in the polyamide matrix along with the porosity modifier to provide high permeability of the film with respect to smoke substances and water vapors, the hydrophilic compound is an inorganic salt. Regarding claim 8, the film includes additives such as antiblocking, plasticizers, and technological additives (col.2,

Art Unit: 1772

1.64-67). Regarding claim 12, the polymer film forms a tubular casing (col.1, 1.5-6).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yen (USPN 6,589,615) in view of Strutzel et al (USPN 4,243,074).

Art Unit: 1772

Yen teaches all that is claimed in claim 1, but fails to teach whether the film is oriented. However, Strutzel et al teach that it is well known in the art of sausage casing to form the film in a non-oriented form, but that they can be oriented uniaxially or biaxially in order to obtain particular physical properties such as increased ultimate tensile strength (col.4, 1.45-50). Therefore, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to form sausage casing films without orientation, uniaxially oriented, or biaxially oriented depending on the intended final properties of the casing especially with regard to ultimate tensile strength, as taught by Strutzel.

Thus, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to form the film of Yen as an unoriented film, an uniaxially oriented film, or a biaxially oriented film, depending on the desired final properties of the sausage casing film, especially the ultimate tensile strength, as taught by Strutzel.

#### ***Response to Arguments***

11. Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.



Art Unit: 1772

**Conclusion**

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ding et al (WO 94/03544 A1).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P. Bruenjes whose telephone number is 571-272-1489. The examiner can normally be reached on Monday thru Friday from 8:00am-4:30pm.

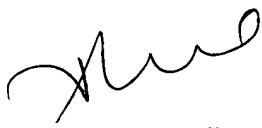
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1772

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christopher P Bruenjes  
Examiner  
Art Unit 1772

CPB  
CPB  
July 30, 2006

  
JENNIFER C. MCNEIL  
SUPERVISORY PATENT EXAMINER  
7/31/06